# Practicum Preparation 05-02 Transactions

- Use Two phase locking (2PL, No locks can be acquired if another transaction unlocked)
- Locks must be held as short as possible and only as exclusive as necessary. Non-conflicting objects need no locks.

### Schedule 1
```
T1: R(A) W(B)
T2: W(C) R(A)
```

### Schedule 2
```
T1: R(A)
T2: W(A)
```

### Schedule 3
```
T1: R(A) W(A)
T2: R(A)
```

### Schedule 4
```
T1: W(A)
T2: R(A) W(Z)
```

### Schedule 5
```
T1: W(B) W(A)
T2: R(A) W(B)
```

### Schedule 6
```
T1: R(A) R(B) W(B) W(D) R(Z)
T2: R(B) R(Y) R(Z) W(Y)
T3: R(A) W(D) R(B)
```

### Schedule 7
```
T1: R(A) W(A) R(B) W(B)
T2: R(B)
T3: R(C) W(C) R(A) W(A) R(D)
T4: R(E) W(E) R(F) W(F)
T5: R(D) R(X)
```